

No. 757,195.

PATENTED APR. 12, 1904.

H. H. HUFF.
ROD GRASPING ARM OR HANDLE.

APPLICATION FILED DEC. 5, 1903.

NO MODEL.

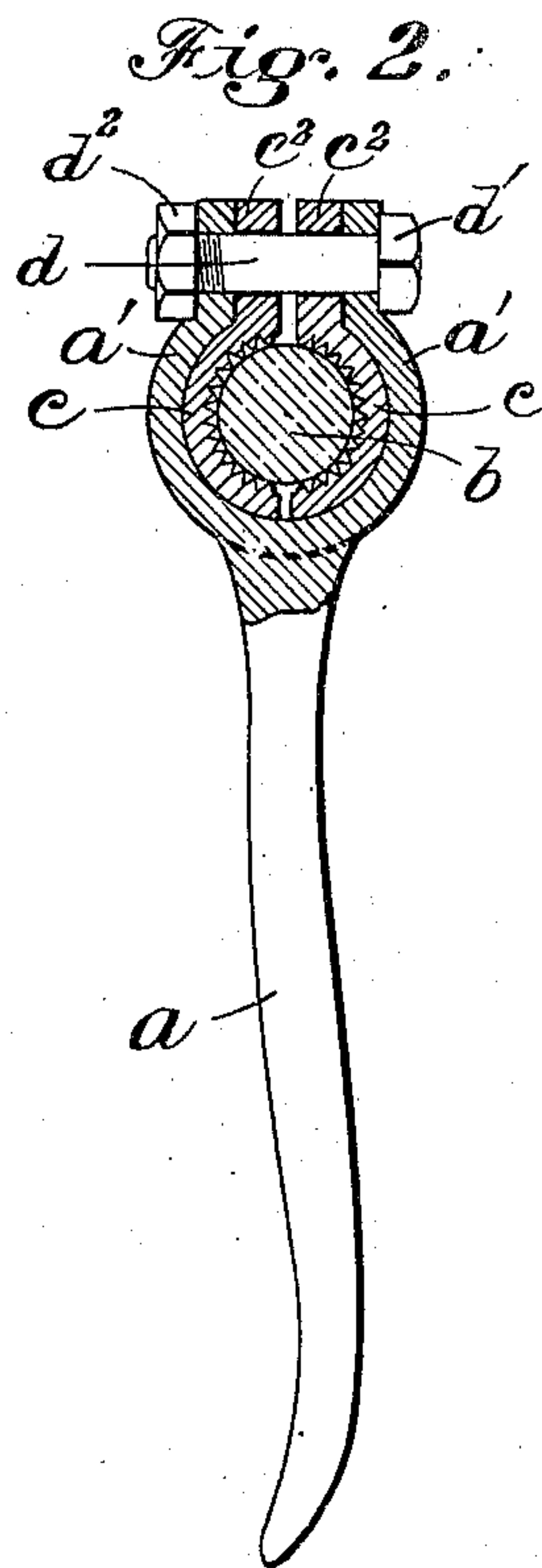
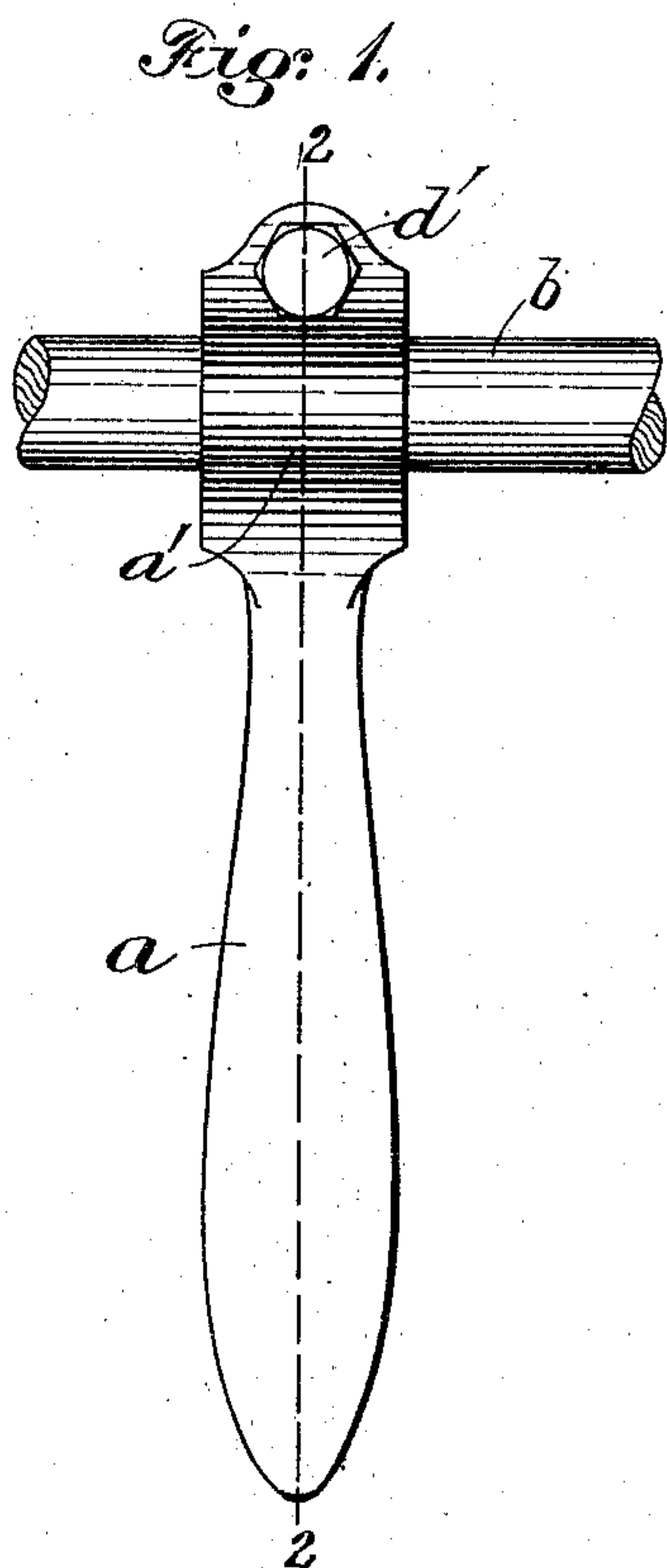


Fig. 3.

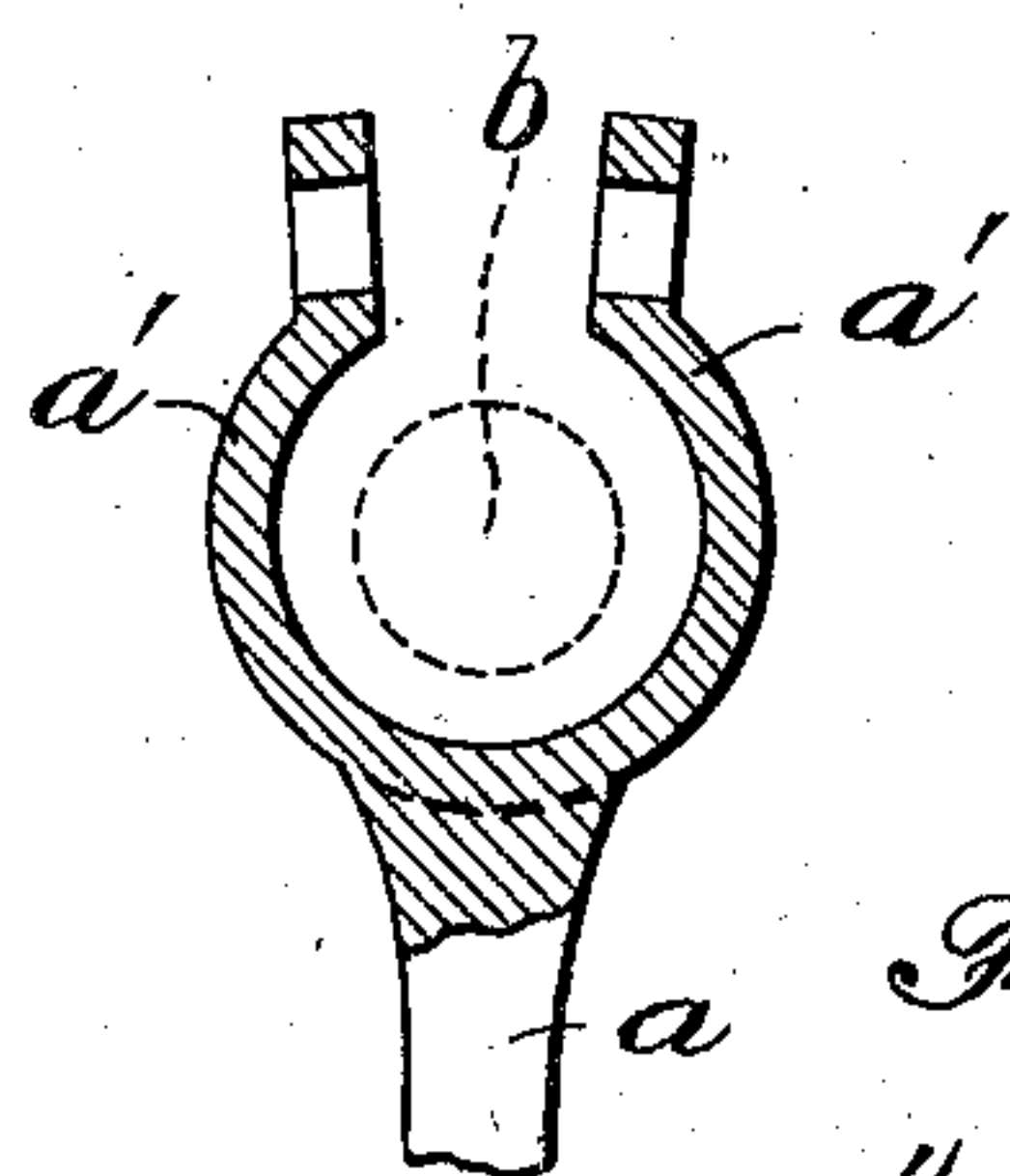


Fig. 4.

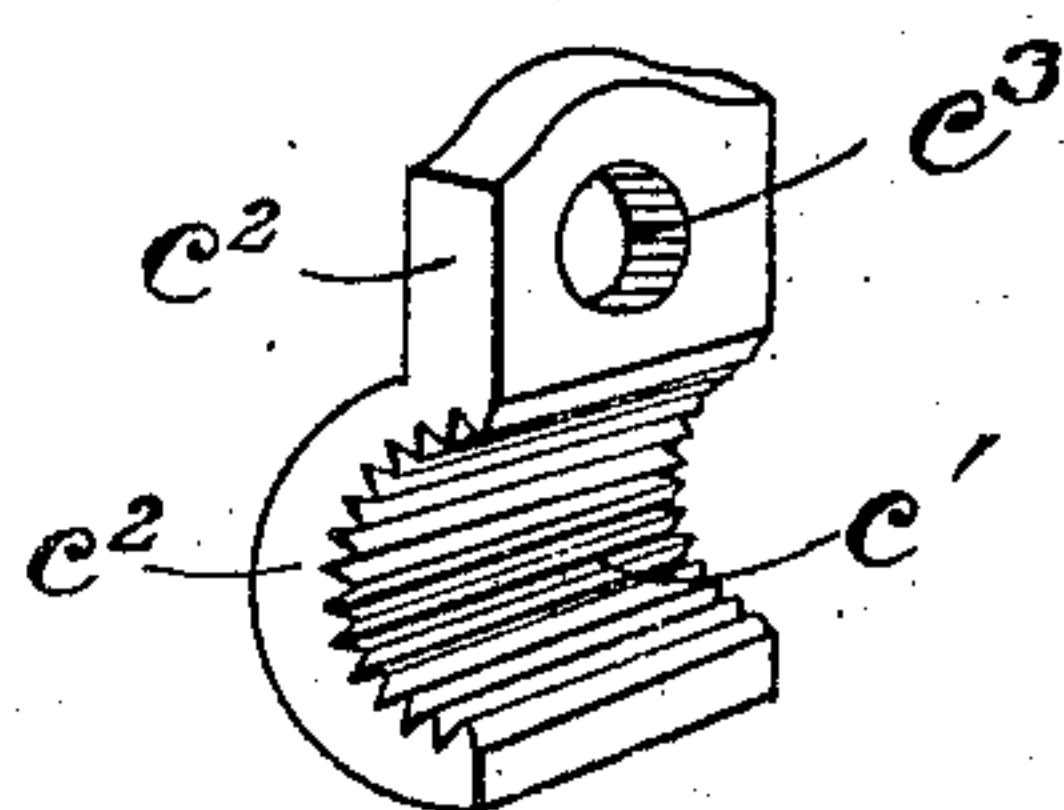
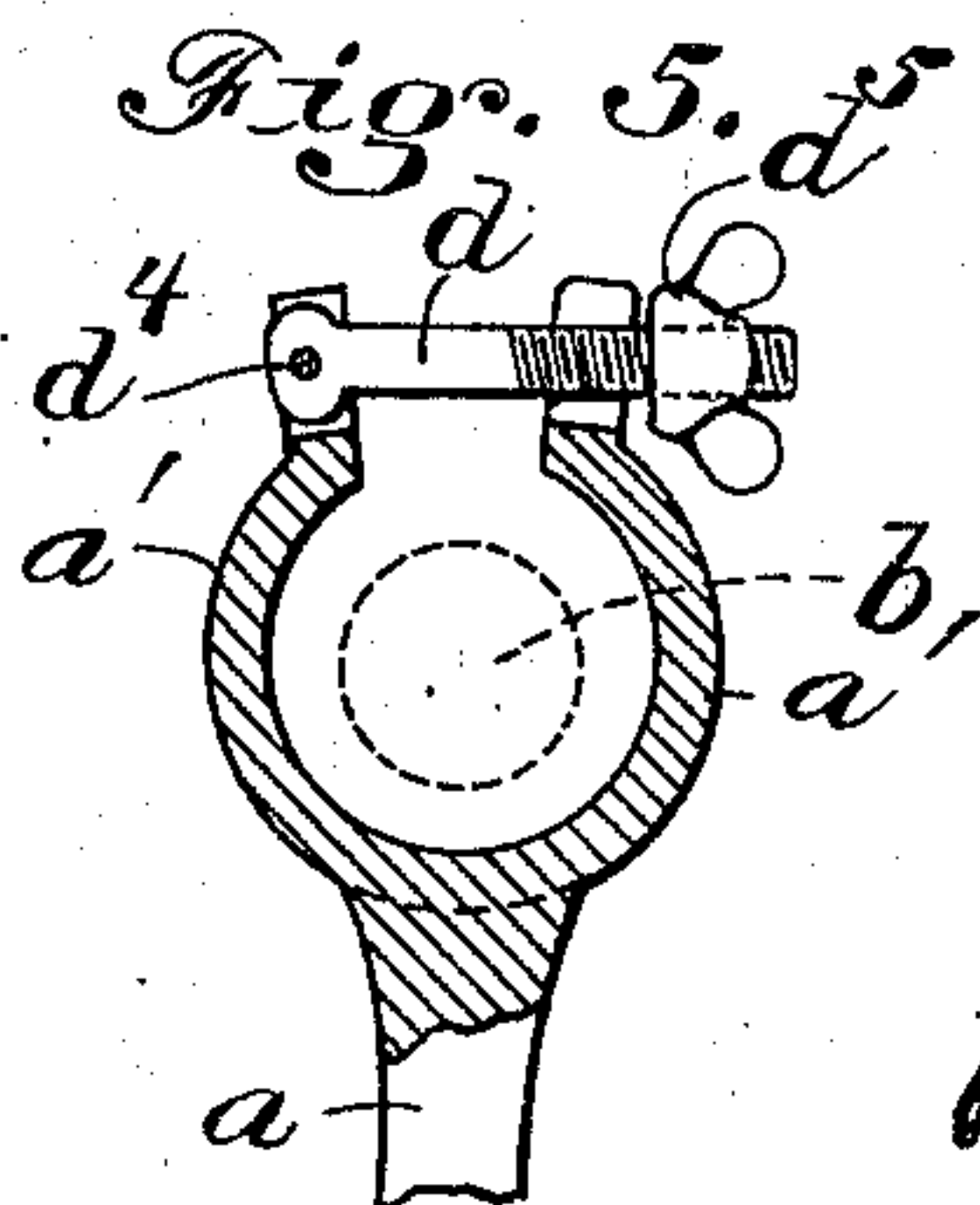


Fig. 5.



Witnesses:
P. W. Azzetti
E. Batchelder

Inventor:
H. H. Huff
by *Wm. Brown Dumbly*
att'y.

UNITED STATES PATENT OFFICE.

HENRY H. HUFF, OF BOSTON, MASSACHUSETTS.

ROD-GRASPING ARM OR HANDLE.

SPECIFICATION forming part of Letters Patent No. 757,195, dated April 12, 1904.

Application filed December 5, 1903. Serial No. 183,855. (No model.)

To all whom it may concern:

Be it known that I, HENRY H. HUFF, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Rod-Grasping Arms or Handles, of which the following is a specification.

This invention has for its object to provide an arm or handle adapted to be readily and detachably affixed to a rod or shaft which is mounted in fixed bearings without requiring the removal or displacement of the rod, the handle being intended particularly to operate the rod or rock-shaft used to actuate a fare-register in a street-car.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation showing my improved arm or handle attached to a rod or rock-shaft. Fig. 2 represents a section on line 2 2 of Fig. 1. Fig. 3 represents a sectional view showing the yoke portion of the arm or handle, the other parts being removed. Fig. 4 represents a perspective view of one of the jaws. Fig. 5 represents a modification.

The same reference characters indicate the same parts in all the figures.

In the drawings, *a* represents an arm, which, as here shown, is formed to be conveniently grasped in the hand and to constitute a handle by which to rock or partially rotate a rod or rock-shaft *b*, the latter being, for example, the usual rock-shaft which is mounted in fixed bearings in a street-car and is suitably connected with the mechanism of a fare-register. The arm *a* is forked at one end, the arms *a'* *a'*, constituting the fork, being separated by a space which is open at one end and is wider and deeper than the diameter of the rod *b*, the said arms constituting a yoke which is adapted to bestride the rod *b*, as indicated in Fig. 3.

cc represent jaws which are formed at their inner sides to bear upon the periphery of the rod *b* and are preferably provided with sharp-edged teeth *c'*, adapted when pressed against the surface of the rod to slightly indent the latter, and thus firmly engage it. The form

of the jaws in cross-section is such that they are insertible by an endwise movement between the arms *a'* of the yoke and the periphery of the rod when the yoke and rod are held in the relative positions indicated in Fig. 3.

Means are employed for compressing the yoke or moving its arms inwardly to force the jaws *c* against the rod, the preferred means being a bolt *d*, inserted through orifices formed for its reception in the outer portions of the arms of the yoke, said bolt having a head *d'* and a clamping-nut *d''* engaged with the screw-thread of the bolt. The head *d'* and nut *d''* bear on the outer sides of the arms *a'* *a'*, and when the nut is tightened the arms are drawn together and caused to force the serrated surfaces of the jaws against the periphery of the rod. The yoke and jaws are provided with complementary engaging means whereby they are connected or interlocked in such manner that the yoke cannot slip or turn upon the jaws. The preferred engaging means comprise ears *c''*, formed on the jaws, and the above-mentioned bolt *d*, the ears *c''* having orifices *c'''*, through which the bolt passes.

In applying the handle *a* to the rod *b* the yoke portion of the handle is held in the relation to the rod indicated in Fig. 3, and the jaws *cc* are then slipped by an endwise movement parallel to the axis of the rod into the space between the rod and the inner surface of the yoke. The bolt *d* is then inserted and the nut *d''* applied and tightened, this operation causing the jaws to firmly grasp the rod and the yoke to become firmly engaged with the jaws. It is obvious that the handle may be readily removed by removing the nut *d''* and bolt *d* and then slipping the jaws endwise from between the yoke and rod.

In Fig. 5 I show the adjusting-bolt *d* hinged at *d''* to one of the arms *a'* and movable into and out of a slot in the other arm. The bolt *d* is in this case provided with a thumb-nut *d'''*. This construction permits a quick application and removal of the arm *a* without the employment of a wrench.

I claim—

1. A rod-grasping arm or handle having at one end a compressible yoke whose arms are separated by a rod-receiving space open at its

outer end to permit the yoke to be applied to a rod by an endwise movement, the width and depth of said space exceeding the diameter of the rod, grasping-jaws insertible endwise between the yoke and rod, and means for compressing the yoke to cause the jaws to grasp the rod, the yoke and jaws having complementary engaging means to prevent the yoke from turning or slipping on the jaws.

10 2. A rod-grasping arm or handle forked at one end to form a compressible yoke, the arms of which are separated by a rod-receiving space open at its outer end and of greater

depth and width than the rod, jaws insertible endwise between the yoke and rod and having serrations formed to engage the rod, and a headed bolt having a clamping-nut engaged with the outer portions of the arms of the yoke, said jaws having ears which are engaged by said bolt.

In testimony whereof I have affixed my signature in presence of two witnesses.

HENRY H. HUFF.

Witnesses:

C. F. BROWN,
E. BATCHELDER.